

CLAIMS:

What is claimed is:

1 1. A method in a data processing system for
2 transferring data from a plurality of host data links to
3 at least one local data link, the method comprising the
4 steps of:

5 initializing a data bridge, wherein the data bridge
6 is functionally connected on a first end to the plurality
7 of host data links and on a second end to the at least
8 one local data link;

9 determining if a first data link within the
10 plurality of host data links and a second data link
11 within the at least one local data link initiate a login
12 parameter; and

13 automatically transferring the data from a source
14 data link within the first plurality of data links to a
15 target data link within the at least one local data link
16 based on the login parameter.

1 2. The method of claim 1, wherein the data transferred
2 from the source link is stored in a memory buffer device.

1 3. The method of claim 1, wherein the data bridge is a
2 data link concentrator.

1 4. The method of claim 1, wherein initializing the data
2 bridge includes resetting the data bridge.

1 5. The method of claim 4, wherein if the data bridge is
2 reset, the plurality of host data links functionally
3 connected to the data bridge and the at least one local
4 data link functionally connected to the data bridge are
5 forced offline by the data bridge.

1 6. The method of claim 4, further comprising:
2 monitoring a signal from the first data link within
3 the plurality of host data links and a signal from the
4 second data link within the at least one local data link
5 functionally connected to the data bridge;
6 determining whether an initiating sequence signal is
7 received by the first data link and the second data link;
8 and
9 establishing a data bridge active state if the
10 initiating sequence signal is received by the first data
11 link and the second data link.

1 7. The method of claim 6, further comprising:
2 terminating data transfer from the source data link
3 within the plurality of host data links to the target
4 data link within the at least one local data link if the
5 data bridge is in an offline state.

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1 8. The method of claim 6, further comprising:
2 monitoring the plurality of host data links and the
3 at least one local data link functionally connected to
4 the data bridge; and
5 terminating data transfer from the source data link
6 to the target data link if the plurality of host data
7 links or the at least one local data link does not remain
8 in an active state.

1 9. The method of claim 8, wherein if the plurality of
2 host data links and the at least one local data link
3 complete an offline state protocol, the data bridge is
4 reset.

1 10. The method of claim 1, wherein the login parameter
2 includes a fibre channel fabric login parameter and a
3 fibre channel port login parameter.

1 11. The method of claim 10, wherein the fibre channel
2 login parameter includes buffer credits.

1 12. The method of claim 10, wherein the fibre channel
2 port parameter includes a port identification.

1 13. The method of claim 1, further comprising:
2 automatically transferring the data from a source
3 data link within the plurality of host data links to a
4 buffer device if the data bridge is in a lockout mode.

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1 14. An apparatus for transferring data from a plurality
2 of host data links to at least one local data link,
3 comprising:

4 and array of data links; and
5 a data bridge coupled on a first end to the
6 plurality of host data links and on a second end to the
7 at least one local data link, wherein the data bridge is
8 initialized, the data bridge determines if a first data
9 link within the plurality of host data links and a second
10 data link within the at least one local data link
11 initiate a login parameter, and the data bridge
12 automatically transfers the data from a source data link
13 within the plurality of host data links to a target data
14 link within the at least one local data link based on the
15 login parameter.

1 15. The apparatus of claim 14, wherein the data
2 transferred from the source link is stored in a memory
3 buffer device.

1 16. The apparatus of claim 14, wherein the data bridge
2 is a data link concentrator.

1 17. The apparatus of claim 14, wherein initializing the
2 data bridge includes resetting the data bridge.

1 18. The apparatus of claim 17, wherein if the data
2 bridge is reset, the plurality of host data links
3 functionally connected to the data bridge and the at least

4 one local data link functionally connected to the data
5 bridge are forced offline by the data bridge.

1 19. The apparatus of claim 17, wherein if the data
2 bridge monitors a signal from the first data link and a
3 signal from the second data link functionally connected
4 to the data bridge, the data bridge determines whether an
5 initiating sequence signal is received by the first data
6 link and the second data link, a data bridge active state
7 is established if the initiating sequence signal is
8 received by the first data link and the second data link.

1 20. The apparatus of claim 19, wherein the data bridge
2 terminates data transfer from the source data link to the
3 target data link if the data bridge is in an offline
4 state.

1 21. The apparatus of claim 19, wherein the data bridge
2 monitors the plurality of host data links and the at
3 least one local data link functionally connected to the
4 data bridge and the data bridge terminates data transfer
5 from the source data link to the target data link if the
6 plurality of host data links or the at least one local
7 data link does not remain in an active state.

1 22. The apparatus of claim 21, wherein if the plurality
2 of host data links and the at least one local data link
3 complete an offline state protocol, the data bridge is
4 reset.

1 23. The apparatus of claim 14, wherein the login
2 parameter includes a fibre channel fabric login parameter
3 and a fibre channel port login parameter.

1 24. The apparatus of claim 23, wherein the fibre channel
2 login parameter includes buffer credits.

1 25. The apparatus of claim 23, wherein the fibre channel
2 port parameter includes a port identification.

1 26. The apparatus of claim 14, wherein the data bridge
2 automatically transfers the data from a source data link
3 to a buffer device if the data bridge is in a lockout
4 mode.
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